StarEnterprise



May 3, 1989

303 Fellowship Road CS-18 Moorestown NJ 08057 609 778 1400

Mr. Cedric Sanborn
Management Section
Hazardous Materials Unit
Agency of Natural Resources
103 South Main Street
Waterbury, Vermont 05676

Re: Environmental Incident

Your Ref. 1272 Order No. 7-8811 White River Texaco Service Station

I-91 & Route 5

White River Junction, Vermont

CEA Ref. File #2724-88

Dear Mr. Sanborn:

On behalf of Texaco Refining and Marketing Inc., we are writing in reference to the above location and remediation activities currently being undertaken. As a result of recent monitoring of the site's recovery and monitoring wells and Star Enterprise and Corporate Environmental Advisors' understanding of the State's position concerning cleanup of the site, a request is being made to end remediation activities at the White River Junction service station.

Enclosed is a "Closure Report" supporting this request. We would appreciate your earliest review and decision on this matter as soon as possible. Thank you.

If you have any questions, please contact Mr. Howard E. Phillips at 609/866-3253.

Very truly yours,

STAR ENTERPRISE

JOHN F. LOVE

SUPERVISOR - OPERATIONS

HEP/jp

Enclosure

cc: Mr. Richard Spiese
Hazardous Materials Division

CLOSURE REPORT

TEXACO SERVICE STATION
ROUTE 5
WHITE RIVER JCT, VERMONT

PREPARED BY

CORPORATE ENVIRONMENTAL ADVISORS, INCORPORATED
453 Center Street
Ludlow, MA 01056

Date: April 27, 1989

CEA Ref. File #2724-88



SECTION 1.0 SITE LOCATION & OWNERSHIP

1.1 Site Location

The subject property, White River Texaco, is located along U.S. Route 5 in a commercially-zoned area of White River Junction, Vermont (figure 1). Local access is via U.S. Route 5 which intersects with Interstate 91 at Exit 11.

The study area is found within the Hanover, New Hampshire-Vermont, 7.5 Minute Guadrangle, published by the U.S. Geological Survey.

1.2 Site Ownership

According to the White River Junction, Vermont, Assessor's Office, the site is currently owned by Richard Charland and Phillip Poirier. The underground storage tanks, which were removed, were owned by Texaco Refining & Marketing, Inc., P.O. Box 4582, Atlanta, Georgia 30302.

SECTION 2.0 SITE DESCRIPTION

2.1 Site Layout

The site is located on U.S. Route 5 directly west of the interchange of Interstate 91 and Interstate 89. The property is a rectangular parcel covering 0.70 acres with approximately

220 feet of frontage (figure 2). U.S. Route 5 is a heavy duty, two-lane bituminous roadway exhibiting heavy traffic flow.

2.2 Site Usage and Surrounding Land Usage

The property currently has a Texaco service station consisting of a station building, pump islands and canopies. The station also serves as a convenience store.

The site is bordered on the north by U.S. Route 5 and property owned by the Veteran's Administration Hospital. A piano store and bakery abut the southern site boundary. The eastern and western property perimeters are bordered by a Howard Johnson's Motel and Swiss Chalet Motel, respectively.

2.3 Environmental Characteristics

The study area is a level parcel with an elevation of approximately 580 feet above mean sea level (U.S. Geological Survey, Hanover, N.H.-Vermont Quadrangle, N4337.5-W7215/7.5). The site is covered with bituminous pavement, with the exception of the area proximal to the remediation system, and is essentially devoid of vegetation. No surface waters or wetlands occur on the site, nor are there any reported private water wells in the immediate area. A wetland associated with a small stream is located approximately two-hundred feet south of the southern site border.

SECTION 3.0 FIELD INVESTIGATIONS AND LABORATORY ANALYSIS RESULTS

3.1 Field Activities

From December 13, through December 16, 1988, six underground storage tanks were removed from the subsurface. During these operations, representatives of the Vermont Department of Environmental Conservation (DEC) were present on site. During the course of these activities, floating product was observed in one of the tank holes. As a result, Star Enterprise, as agent for Texaco Refining and Marketing Inc., under Order No. 7-8811, was required to hire a qualified consultant and prepare and implement product recovery. According to the referenced Order, product recovery would be required until all free-floating product was removed from the site. On December 19, 1988, a thirty-six inch recovery well was installed to a depth of thirteen feet along the south side of the former tank pit. The recovery well was equipped with a Scavanger pump for the purpose of withdrawing product from the surface of the groundwater table. Extracted product was then directed to a two-thousand gallon separator tank housed approximately thirty feet distant of the recovery well. The discharge from the bottom of the separator was then pumped through a sediment filter, to remove turbidity, and through dual-carbon canisters

for the purpose of removing volatile organic compounds. During the dewatering of the tank pit and during tank installation, daily samples of the influent waters directed into the treatment system, and in-line, and effluent readings from the dual carbon units were taken. Samples were obtained weekly and analyzed according to EPA Method 602, modified by adding a polar column to allow for quantification of C1 to C14 aliphatics. In addition, the treated groundwater discharge was limited to 30,000 gallons per day. Following removal and installation of the tanks, recovery operations continued as did weekly sampling of the system's influent, midpoint and effluent to the current date.

Monthly monitoring of site's five monitoring wells (CEA-1, CEA-2, CEA-4, CEA-5, CEA-6) and the recovery well was initiated on March 16, 1989. The purpose of the monitoring and well gauging activities was to determine the continued presence of floating phase product and to identify dissolved phase levels within the site area. During this sampling event, no floating phase product was identified within any of the site's wells or the recovery well. However, well CEA-1, located to the south of and downgradient of the tank grave could not be located due to construction activities during the remedial



system installation. Therefore, conclusive evidence could not be established as to the removal of all floating phase product from the site.

On April 13, 1989, monthly sampling and gauging of the entire site's monitoring and recovery wells was again attempted.

During this sampling event, all wells and the recovery well were located with the aid of a ferromagnetic detector. Well gauging indicated the absence of any floating phase contamination across the site.

A review of dissolved phase levels (BTEX) within the monitoring wells and the recovery well for March 16 indicated wells CEA-5, and CEA-6 absent of detectable contaminant levels with CEA-2 containing 70 ppb. Dissolved phase levels within the recovery well and CEA-4 contained 175 ppb and 1880 ppb, respectively, for this same sampling period. The April 13 increase in dissolved phase levels for these two wells, i.e., 3351 ppb for CEA-4 and 9115 ppb for the recovery well, can possibly be attributed to a rise in groundwater levels, thereby inundating previously suspended contaminant, and the sampling of the recovery well occurring in varying phases of the pump cycling event. During the April 13 sampling event, nondetectable levels of purgeable aromatics were identified within well CEA-1, which is situated downgradient of the former tank area. In addition, detectable levels of contaminant were not identified in the remaining wells on-site. As previously

stated, weekly monitoring of the system's influent, midpoint, and effluent have continued since the removal and installation of new tanks. Following are graphs depicting system influent BTEX and C1-C14 values. As both graphs indicate, dissolved phase contamination within the recovery well's influent has decreased significantly since system startup.

SECTION 4.0 CONCLUSIONS

Monthly gauging of all on-site monitoring wells and the recovery well over the previous two month period indicates the absence of floating phase contamination across the site. In addition, dissolved phase contaminants within the recovery well influent have shown a dramatic decrease relative to intitial system startup values. This decrease, and analytical results of dissolved phase contaminants within the site's groundwaters, indicate a majority of the contamination has been removed. Therefore, based primarily on the absence of floating phase contamination within any of the site's monitoring wells or recovery well over the past two month period, a request is being made to terminate remedial operations on the site and removed associated equipment. In addition, a recommendation is made to continue quarterly sampling and gauging of all on-site monitoring wells and the recovery well over a one (1) year period. All gauging and analytical results will be forwarded to the Department of Environmental Conservation.

CERTIFICATION STATEMENT

It is hereby certified that the methodologies, techniques and findings of this technical report have been conducted in accordance with relevant environmental regulations, applicable professional standards and prudent engineering practices and that the information, attached documents and data are true, accurate and complete to the best of our knowledge.

CORPORATE ENVIRONMENTAL ADVISORS, INC. 453 Center Street Ludlow, MA 01056 (413) 589-0548

William T. Andrews
Director, Site Assessments & Remediation

Gary P. alicandra

Gary P. Alicandro President Certified Hazardous Materials Engineer Steven Migr#dichian Vice President Principal Hydrogeologist

Date: April 27, 1989

CEA Ref. File #2724-88-0810

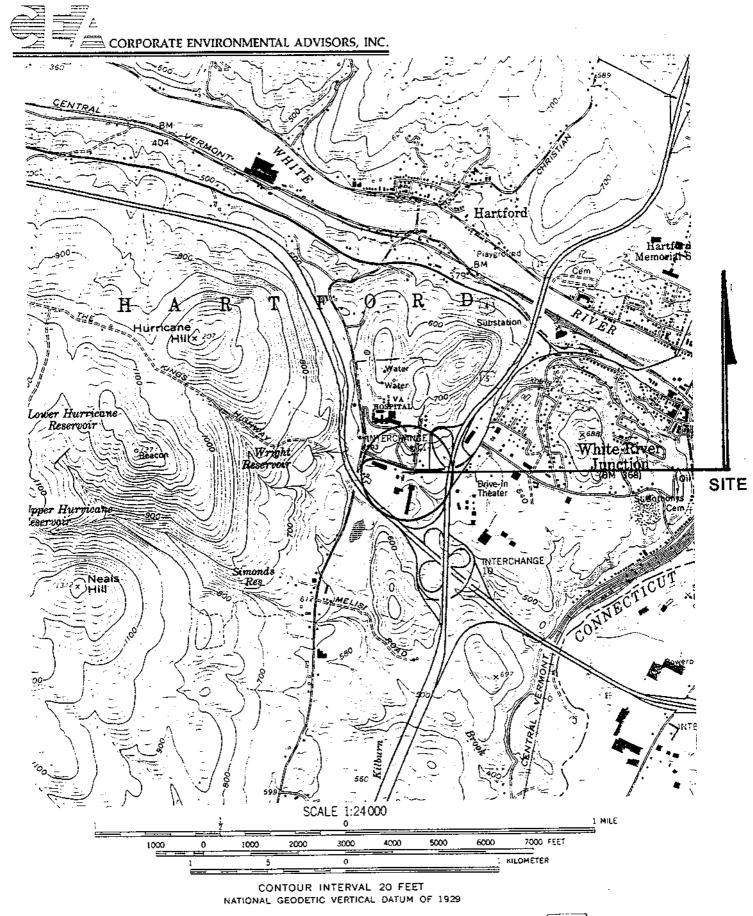


FIGURE 1 SITE LOCUS F.ANOVER, N. H.-VT.

N4337.5-W7215/7.5

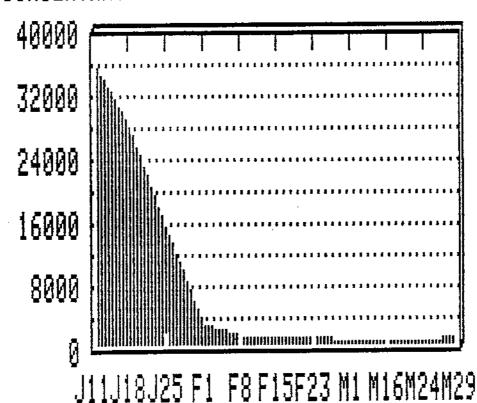
1959 PHOTOREVISED 1980 DMA 6571 III NE-SERIES V813





TEXACO WHITE RIVER JCT., VT

CONCENTRATION (PPB)

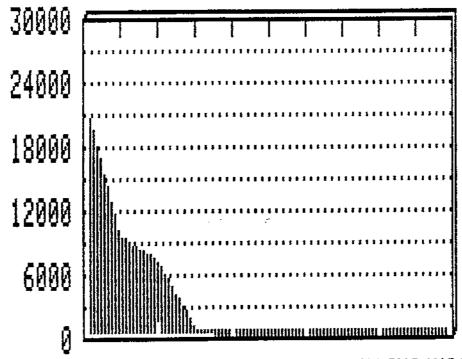


JAN THROUGH MAR. 1989

TOTAL DISSOLVED HYDROCARBONS

TEXACO WHITE RIVER JCT., VT

CONCENTRATION (PPB)



J11J18J25 F1 F8 F15F23 M1 M16M24M29

JAN.THROUGH MAR. 1989

TOTAL BTEX

we _41 .

PERMITTEE Texaco Refining & Marketing Route Solution Total Solution Total Tota				PERMI	TTEE_	Texac	o Refin	ing &	Marke	ting		PERM	M TIN	o. <u>/</u> -	8811			MONT	ГН	Jain	Jal y		. 19	_	Page	07
No. PERMIT MONITORING INFORMATION PERMIT MONITORING INFORMATION PERMIT NO. PERMIT PERMIT NO. PERMIT PERMIT NO. PERMIT				Add	1r e 55: _	Dhite	River	Juneti	on. V																	
Date				Þ		WIII. L.C	<u> </u>	Julio C	-7111			PERMI	T MONI	TORING	INFORM	MOIT										
FLOW CACCUS INTURNITY OF FRUENTS FRUENCH CANADAT NO. 7. ERROR FLOW CACCUS INTURNITY OF FRUENTS FRUENCH CANADAT NO. 7. ERROR FLOW CACCUS INTURNITY OF FRUENCH CACCUS INTURNITY OF THE REPORTANT NO. 7. ERROR FLOW CACCUS INTURNITY OF THE REPORTANT NO. 7. ER			īr	if luent	110110				EFFL.	UENT	ppb								SIZE AN	ED TYPE C	F DEVICE					
			т —	ppb			1 2					1	1	т								TO EFF	LUENT			
	Date	~	EA-1	E	PD ischarz		otal Sissolva Jydro	EA-3	MEX.	10			2	S 10	13	16		148	DATE	INCHES	FLÓW	FLOW	ACTUA	×	100 = % ERRO	ЭR
		<u> O =-</u>		\$ EZ	109	1	<u> </u>	-		<u>-</u>									I	↓	ļ	┞	ļ <u> </u>			
FACTORY CALIBRATION DATE: BY WHOM: COMMENT AND EXPLANATION OF ANY VIOLATIONS	2		·	 	_ _	1									\vdash			 	 -	ļ	 	·	-			
	3		1						:	ļ	ļ	-		+	 			 	 	 	├	├──	 			
STATE	4		Ţ			<u> </u>		ļ	<u> </u>			 		-	+				FACTOR	RY CALIBI	ATION D	AYE:				
Comment and Exp. Anatron of any violations Confidence of introduction of the control of the			 	<u> </u>		-			ļ. —		-		┨——	+	 		 	 								
1	-	—	 	<u> </u>	·			┼	 	 -	 	+		 	1			 	COMME	HTAND E	XPLANAT	ION OF	OITAJON YKA	NS		
1 37000 28000 1 1 28000 1 1 2 1 1 1 1 1 1 1			┼	 			_		 -	t	├	 		 	T			T	(Refere	ace all att	O Chments	here)				
1 3700 2300 BT. ND			 			_		 		<u> </u>		-	1					Ι]							
12 13 14 15 15 16 17 17 17 17 17 17 17			 	1		+									7		<u> </u>		1							
19	11	37000	1	23000			BIL		ND		<u> </u>			1	1.5		ļ	<u></u>	4							
14	12		· · · · · · · · · · · · · · · · · · ·						ļ		 	 			-		 		-							
10	13		1				—	.l	 	 	 -		 - -	+	 		 	† 	1							
2311			ļ	 				 	1	 	+		┤─		i -		 	+	1							
2900 10000 849 370 0.7				-	 -	+		+ -		 	┼	 	1	 			1	 	1							
1000			 	+	231	1		 	 -	†				—	1		T	T]							
			+	1000			370	†	0.7	!	1]							
22 350 350			+		222	5	1	1						<u> </u>			<u> </u>		4							
1	20				222	5				<u>'</u>			\bot	_			 -		-[
Prepared by	24			ii	35	0			<u> </u>		 			 -			 	+	4							
Prepared by			1		507	<u>Д</u>		-	ļ	i -	 	-		 	+		 	+	1							
25 16000 7700 325 0.3 0.3 0.3			 	1	1243	[+-			 			 	+	1							
I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMIL LAR WITH THE INFORMATION SUBMITTED HALE IN BASED ON MY INQUIRY OF THOSE MEDIATELY RESPONSIBLE FOR ON MY INQUIRY OF THOSE MEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THE SUBMITTED INFORMATION IS TAVE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNATED AND ADMINISTRATIVE AN			ļ				0.3		0.3		+		 		+		 		۰.,	pared by						
AND AM FAMILIAR WITH THE INFORMATION SUBMITTED REPORTS BEED ON MY INQUIRY OF THOSE IMPEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, IBELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE I AM AWARE THAT THERE ARE SIGNATED AND THE POSSIBILITY OF FINE AND IMPRISONMENT. APPROVED BY [Authorized Agent for Permittee] MIN COPY TO PERMITTEE			+-	1.700			0.3	+	10.3	ī	+	+							los	RTIFY UN	DER PEN	ALTY OF	LAW THAT IN	IAVE PER	SONALLY EXA	MINED
28 3300 OBTAINING THE INFORMATION, IBELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE IAM AWARE THAT THERE ARE SIGNATED AND THE POSSIBILITY OF FINE AND IMPRISONMENT. 30 THE POSSIBILITY OF FINE AND IMPRISONMENT. AVE Approved by			+	1 1			_			1	T								AN	D AM FAM	IL IAR WI	TH THE 1	NFORMATION S	SUBMITTE	DHEREIN. BA	LSED
29 3340 IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNATED FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRIBONMENT. AVE MAX MIN COPY TO PERMITTEE PINK COPY TO PERMITTEE	28		+	1-1				1		<u> </u>									- on	TAIMING T	HE INFOR	MATION	TRELIEVE TH	(E SUBMI	TTEO INFORM	ATION
TOTAL Approved by		·	1	1 1	334	0					ļ			_			ļ	 -	.J is '	TRUE, AC	CURATE	AND CO	MPLETE. I AL	SHAWA N	THAT THERE .	ARE SIG-
TOTAL Approved by (Authorized Agent for Permittee) WINTE AND VELLOW CORPES TO STATE PINK COPY TO PERMITTEE	30								ļ	k .	 	-	 	 	+		+	- 	- NIF	ICANT PI	HALTIES	FINE A	IDMET LING FAL NO IMPRISON!	LSE IMPOI MÉNT.	TERRITOR, INCL	"ANIUA
Approved by	·-·-	Ĺ						 	 	-	 	~ 	 -	 	+		+	+	┨ ```							
MAX Approved by (Authorized Agent for Permittee) MIN COPY TO PERMITTEE		ļ		<u> </u>				-	┥──┈		+			 	1	<u> </u>	1	 	1							
WIN COPY TO PERMITTEE		ļ	· -					+	 		+		+					1] Ap	proved b	у					
WILL AND VELLOW COPIES TO STATE PINK COPY TO PERMITTE		 		 				+	 -	+	+	—					<u> </u>]					•		
WR-43- ORIVISED 1987		AFVISED.	1987	_1		1				_					WHITE	AND '	LELTO	W COPI	ES TO	STATE		PIN	IK COPY T	O PER	MITTEE	

			Ad	ITTEE . dress:	Ro	exaco Refi oute 5 hite River						S/	N	7-8811 INFORM		B	MONT	Н_ <u>Fe</u>	bruar	у		19_89_	Page	<u> </u>	of
	_			Phone:							1. CL/MI		CITATO					SIZE AM	O TYPE O	F		**			
		I	nflueni Pph	t				EFFL	.UENT	ppp									O TYPE O						
i	ve		1		8	<u>;</u>	1	Ţ	[]				ì	Į		FLOW C	HECK2	INFLUEN	TQ EFF	CENTO			
Date	Total Dissolv H <u>ydro</u> ,	CEA-1	BTEX	Gab	Discha	Total Dissolv. Hydro	CEA-3	BTEX	ي ا		12		14	15	16	17	18	DATE	HEAD	ACTUAL FLOW MGO 24	CHART FLOW MGO	(ACTUAL - CHA)	X100 = %	ERROR	23
	3500		1400	133	ळी	0.3	<u> </u>	0.3	~			'' '	 			1									
	-7		12-00		200 1	14.5	 	<u> </u>										Ĺ							
- 3					200		 		1			Ţ		<u> </u>							<u> </u>				
4	-				700		<u> </u>												<u> </u>	<u> </u>	<u>. </u>	J			
3			1	27	00		<u> </u>	<u> </u>			<u> </u>			<u> </u>				BY WHO	Y CALIBR	AT KON DA	ATE.				
					'00.Ì		1	<u> </u>	<u> </u>		ļ <u> </u>	<u> </u>					1 1.				100 05 4	NY VIOLATIONS			
7				30	188		ļ <u> —</u>	1000	 			-	-			-			n, and e. See off att			M) TIQUALIONS			
	2300		570			0.2	↓	0.2	 	<u> </u>	 	 -				——-i		-							
•					00		┼	 	 	├──	 	-	├	 											
10			1	1,7	000			- 	 			 	 -												
"			ļ		00		+	- 	├ ──	-	 	1	 				H								
(2			ļ		.00			 	}	 	 	 	i 	 											
13			↓		.00		+	 	1			 	•	ļ ————											
	2000		450		66 1	0.2	┼─~	0.2	· 	_	 	_	-												
10			4.00		300 I		1	13000	i	1	T	1													
	 		+		300			 	ī	T		7													
10	 		 		700	-	1		!	Ī		<u> </u>					L								
18			†		500				:	T		<u> </u>	ļ				\sqcup	•							
20			 	81	no		1			<u> </u>	<u> </u>	<u> </u>													
21	1			24	00			<u> </u>		ļ			<u> </u>	-								_ 0	$\langle \cdot \rangle$	\cap	
22				32	288			1~~	!	╄		├	 	├ ──			\vdash			i∧	\sim \sim	2	$\mathcal{L}\mathcal{V}\mathcal{U}$	1	
23	1990	ļ,	450			0.2		0.2		├ ──	 	-		 	 -		1			il	N 771	7). (U	$(\Box)_{\alpha} F_{\alpha}$		
24	<u> </u>	<u> </u>			200 j			 -	<u> </u>	 	 	+	┈	 				•		- 1	N MM	Activ ~	VIII II	$\dot{\gamma}$	
25		<u> </u>	<u> </u>		200				'	-	 	+	 -	 			i		pared by		1				
26		<u> </u>	 		300 i 100 i		- 		:	 	 	+	 	1			t	1 CEI	RTIFY UNI LAM FAMI	DER PENA Liar Wi1	ALTY OF THE 16	LAW THAT I HAVE FORMATION SUSI	FERSONALLY SITTED HEREIN	EXAMINE: 1. BASED	U
27	1	ļ <u> </u>	·		900		+	+		1	 	+	\vdash				 	ON I	MY INQUIR	Y OF TH	OSE INDA	VIDUALS IMMEDIA	TELY RESPONS	SIBLE FOR	
28				1 2	3001		┿┈-	i -	-i		 		Τ''''	i			1					(BEL)EVE THE S MPLETE. I AM AV			
30		 	+	 	-		-	1			1	· 		Ţ				NIFI	ICANT PE	MALTIES	FOR SU	BMITTING FALSE	INFORMATION,		
31			+	1	-		 	 		Ť	1			<u> </u>				THE	POSSIB	LITY OF	FINE A	ID IMPRISONMEN	IT.		
TOTAL		├	-j	<u> </u>		-	1	"i		L:							1			•					
AVE.		 		†	Ť	1	1					J	ــــــــــــــــــــــــــــــــــــــ	1	<u> </u>	ļ									
MAX.	 		+							1			↓	1	<u> </u>	 	↓ ——	App	proved by	y			A day Organitas		
MiN	1	1	T	<u>, </u>	i			1]			┸.——	1	L	1	لبيا		~~.~-			Authorized Ager			
	ACUIETO (WHITE	AND Y	Eず FOA	COPIE	STO	STATE		PIN	K COPY TO I	PERMITTEE	-	

44-41-

		F	PERM	AITTE	E _R	exaco oute	Refin	ing &	Marke	ting Co). F	PERM			7-8811		1	MONT	Ή	Marc	<u>ch</u>		. 19 <u>89</u>	Page	_ of
			AL	10163	s :	hite!	River	Jet,	VT			COM	\$/		NFORMA	TION									
				Phon	e:							'ERMII	MONT	UNING	· · · · · · · · · · · · · · · · · · ·			 _	SIZE AN	D TYPE C)E				
		Infl	luent	(dqq)					EFFL	ENT (opb)						,		PRIMAR	Y FLOW	DEVICE				
	Vec	- 2.02	1	Termina T	- S]	ĺ		Ì	İ	, ,	FLOW C	HECKS	INFLUEN	TO EFF	LUENTO		
Date	Total Dissolva Hydro	CEA-1	BTEX		GPD Dischargo		Total Dissolv Hvdro.	CEA-3	BTEX	ю	и	12	13	14	15	(4	17	18	DATE	HEAD INCHES	ACTUAL FLOW MGD	CHART FLOW MGD	AÇTUAL	T) X100 = % ERRO	A 2
	1300		290	"	3700		BDL		ND					ļ	<u> </u>						 				
ž				1	4100				[├──	ŀ	}					┼─~	 		· w	
3	· 1			1	2900		· · · · ·		 _				 	-						 	 	1			
•				<u> </u>	3900		 		 				 	 	 				FACTOR	Y CALIBI	RATION O	ATE:			
3		<u> </u>	 	 	4100	 	 - -	-	 	├──┼			 	1	 			\Box	84 MHG						
			ļ	 	2900		 	 					 	 									LNY VIOLATIONS		
	SUST	no no	oper	ating	2400	line	froze	n	 										(Refere	nce oil at	'GCAMON'S	METAS			
 ;	<u> </u>				2600	 -	 		 					1	<u> </u>										
			 	+—	3500		<u> </u>								<u> </u>				l						
		<u> </u>	 	1	4100		<u> </u>		Ĭi			<u> </u>	ļ	.	1			 	ł						
12			<u> </u>		3700		Ţ		L	├			 		┼				1						
13			T		2800	<u> </u>	 	 	↓	├ ┈─┼		<u>. </u>	┪	 	 -										
14	1	<u> </u>		<u> </u>	2900	<u> </u>		ļ	 				—	┼	i -				1						
(3		1	560	 	2800	├-	BDL	 	- ND	┼─┼		 	 	1	1 1			1]						
16	1700	<u> </u>	1 300	 	3100	┼	 -	 	+				1	1			l —] .						
17		├─	-		3100 2100	!	 	 	 				1	1	İ			Ţ]						
19		 		 	2100	 	 	 	 				1				ļ''								
20		}	 -	+	750	† 	 	<u> </u>	1	1		Ì						┼	4 .	8.4					
21	+		 	 					Ĭ			L		↓					1						
22		 			12488]			!	+				 -	 	1						
23					3100		1	ļ <u> </u>	75-			 -		 	 			 	†						
24	1200		390		3200		BDL	ļ <u> </u>	BDL			 		+			 	1		pared by					
2:		ļ	<u> </u>		3100		+	 	 				+		+		Ι	 				A1TY 05	LAW THAT I HAVE	PERSONALLY EXA	MINED
24		ļ	 	-	2900		 -	 -	 	- 1		\vdash	+	+	-			1	I AMI	N AM FAM	III. IAR WI	TH THE 1	NFORMATION SUDM	ITTED HEKEIM. BA	5 LU
27		 	+		2800 2800		 	1-	 	:		1	1	1					J		*****		LOCK FUT THE SI	FELY RESPONSIBLE IBMITTED INFORMA	LTION
26			780	+	12000	-i -	BDL	 	BDL				1		1		!	·	10.	TRISE A	CCURATI	AND CO	MPLETE, LAM AW	LME THAT THEME A	ARE 314-
30		' 	1,00	+	-	1	- · · · · · · ·	<u> </u>						4	 		 	+	NIF	CANT P	ENALTIÉ BILITY O	5 FOR SU F FINE A	IBMITTING FALSE I NO IMPRISONMEN	NFORMATION, INCL	. U.J. IN 4
3		1	1			1			1				-		1		 	+	- '"	_ , , , , , , , ,				•	
TOTAL	 	1	 	T					ļ <u> </u>			↓ —	-		+	 	 	+	1						
AVE	1 _ "					1		<u> </u>		<u>'</u>		┼		+-	+	-	+	+	AD	proved t	у				
MAX.	Ţ. <u> </u>					- 	 	+				+	 	+	 	.	 	1	1 "				(Authorized Agen	for Permittee)	
MIN	J						l					1			WHITE	AND Y	ELLO	W COPI	ĒS TO	STATE	Ξ	PIR	IK COPY TO P	ERMITTEE	
WR-43-	AEVISEO I	1967																							

TABLE I

PURGEABLE AROMATICS

WHITE RIVER JUNCTION, VERMONT SERVICE STATION GROUNDWATER SAMPLES ANALYSIS BY TEXACO PORT ARTHUR RESEARCH LABS

SAMPLE DESCRIPTION	BENZENE	TOLUENE	ETHYLBENZENE	XYLENES
CEA-2	70	ND	ND	ND
CEA-4	1130	270	10	470
CEA-5	ND	ND	ИД	ND
CEA-6	ND	ND	ND	ND
R₩	12	13	ND	150
INF	80	70	D	410
Eff.	ND	ND	ND	ND
Mid	4	7	ND	53

All values are in ug/L.
ND - not detected (method quantitation limit of 1 ug/L).

BTEX analysis of aqueous samples by EPA Method 602 for Purgeable Aromatics (Purge-and-Trap, Gas Chromatography) from EPA-600/4-82-057 ("Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater").

SAMPLE COLLECTION AND ANALYSIS INFORMATION

Sampling site:

Texaco Service Station

White River Junction, Vermont

Sample collector:

Corporate Environmental Advisors, Inc.

453 Center Street

Ludlow, Massachusetts 01056

Sample collection date :

March 16, 1988

Sample shipment date:

March 16, 1989

Sample arrival date:

March 17, 1989

Sample analysis date:

March 22, 1989

_

RBB-TSH -2-4-21-89

TABLE I

PURGEABLE AROMATICS

WHITE RIVER JUNCTION, VERMONT SERVICE STATION GROUNDWATER SAMPLES ANALYSIS BY TEXACO PORT ARTHUR RESEARCH LABS

SAMPLE DESCRIPTION	BENZENE	Toluene	ETHYLBENZENE	XYLENES
CEA-1	nd	ND	מא	ND
CEA-2	ND	ND	ND	ND
CEA-4	1490	1990	11	1740
CEA-5	ND	סא	ND	ND
CEA-6	MD	ND	ND	מא
RECOVERY WELL	650	2540	210	5890

All values are in ug/L.

ND - not detected (method quantitation limit of 1 ug/L).

BTEX analysis of aqueous samples by RPA Mathod 602 for Purgeable Aromatics (Purge-and-Trap, Gas Chromatography) from EPA-600/4-82-057 ("Methods For Organic Chemical Analysis of Municipal and Industrial Wastewater").

SAMPLE COLLECTION AND ANALYSIS INFORMATION

Sampling Site:

Texaco Service Station

White River Junction, Vermont

Sample Collector:

Ms. Stephanie Spolzino

Corporate Evvironmental Advisors, Inc.

453 Center Street

Ludlow, Massachusetts 01056

Sample Collection Date :

April 13, 1988

Sample Shipment Date:

April 13, 1989

Sample Arrival (at PARL) Date:

April 14, 1989

Sample Analysis (by FARL) Date: April 19, 1989

CHAIN OF CUSTODY RECORD

 $oldsymbol{1}_{oldsymbol{1}_{i}}$, $oldsymbol{1}_{i}$, old

SHEET No. _____

PROJ. NO.	Pf	ROJE	CT N	IAME		Sample Matrix		ANA	LYSI	S TYI	PE REQ	QUESTED
Samplersy 1	<u> </u>			xacas			No.				//	
I.D. NUMBER	TIME	С О М Р.	G R A B	STATIO	N LOCATION .	14.00	of Con- talners	V	<u>}/</u>		//	REMARKS
CEA-2 N				Murle R	1 VOI (1/1 V+	1/20	2	V				M-H
CFA-4		Ž			/		2					M-H
CLA-5		/				190	2	1		-		L-M
C1A-6 19		V_{μ}		·]	<u> </u>	2	v/				4-m
RW					/	1	2	V				m-14
						1941						
						中	12 40					
				·		3 9		<u> </u>				
	ļ				·	. 14 (e.	ļ <u>.</u>					
	<u> </u>					Saltar Saltar		ļ . }				
	ļ						<u>. (3</u>					
<u></u>	<u> </u>					- 越資金	3.0					
Soffino	Relincuished by: (Signature) Date/Time Received by:									reet, L	udlow, M	IVIRONMENTAL ADVISORS, INC. Massachusetts 01056
Relinquished by: (Signature	e/Time	Received by: (Signal		(413) 589-0548 FAX (413) 583-5283 TO:								
Relinquished by: (Signature	e/Time	Received by: (Signate	ignature) 7 . X . L						V. W. L			
WHITE — File copy YE	LLOW-	- —Ł	abor	atory copy	PINK — Verification	сору		PRO	JECT M	IAŅAG	ER:	W. Andrewy

CHAIN OF CUSTODY RECORD

SHEET
No. _____

PROJ. NO.		P	ROJE	CT N	IAME		Sample Matrix		ANA	LYSI	S TY	PE RI	QU	ESTED		
2724-8	8	$\perp \bar{z}$	70	XC	100		Mainx,				*-/		/	/ / /		
Samplers		,	P	1			ļ			2	-7					
11/1/May	MC.		100	11	<u>u)</u>			No.		0%	/ /		′ /	/ /	REMARKS	
I.D. NUMBER	DATE	TIME	COM P.	G A A B	STATIO	LOCATION		Con- tainers		9	/.,	Ι,				
CEA-1	Ü		7	15	White K	Iver Qt. V+	H20	3		·				M-H		
010-2	14	- "	1,/	1	VII. VIII - V	1	100	3			·			m-H	•	
CEA-4	3		17	╀─┤		1		3	1					m-H		
CFAF	11		V	1				3						med		
CEM-5	14		V	 			17	3	 		٠,			meD		
(6/1-6	Y		V			1	Y	_	-							
Reco		<u> </u>	V			Ψ	<i>V</i>	3	<u> </u>					m-H		
						<u> </u>	3.2	1.37								
		ļ		<u> </u>			1.00		1		,				,	
, J.	11	1			11	1 -	1		10	b -	1	1				
X	MU	as		V	Ulude	C1	U/-	1-6	W	P	a	IC	1			
			1	ļ			1. 00-107 j.									
		!	-			1 1	31		ļ							
Relinquished by: (S	ignațųre		. /	Dat	e/Time	Received by: (Signa	ture)	5 1 1 - 40 80			<u> </u>					
I II I		/ !	1/12	L	500		100	: } (€		7∆ Æac	ORPO	RATE	ENVI.	RONMENTAL ADVI	SORS, INC.	
	MAX		1	184			18	4	iss ce	nter St	reet, L	wolbu	, ivia	ssachusetts U1U50		
Relinquished by: (S	lgnature	*	•	Dat	e/Time	Received by: (Signa	ture)	1, (413) 5	89-054				583-5283		
-	\mathcal{O}								го:		1	\supset $_{/}$		R.L.		,
Relinquished by: (S	ianature			Dat	te/Time	Received by: (Signa	ture)					1 /	"	1.2-1		
,,,,,								1000		. •						
							5	?!	• ' '.	. :						,
WHITE - File copy	YE	LLOW-		Labor	ratory copy	PINK — Verificatio	п сору	1	PRO	JECT I	MANAC	ER:	Ţ.	3110 An	Vracus	

CORPORATE ENVIRONMENTAL ADVISORS, INC. 453 Center Street, Ludlow, Massachusetts 01056 (413) 589-0548

OBSERVATION WELL GAUGE REPORT

		Service			DAT	E <u>Mar</u>	ch 16, 1	1989			
						ECT NO					
						RUMENT_			oe		
		Α		С					_		
WELL	WELL DEPTH	CASING ELEV.	DEPTH TO PRODUCT	DEPTH TO WATER	PRODUCT THICK. (C·B)	PRODUCT ELEV. (A-8)	WATER ELEV. (A-C)		REMARKS		
CEA-1								Not lo	ocated		
CEA-2				9.02	0.00						
CEA-4			-	9.50	0.00						
CEA-5				7.39	0.00						
CEA-6				8.65	0.00						
RW				10.84	0.00			_			
							-				
							-		<u> </u>		
		<u> </u>									
<u></u> .			 		<u> </u>				··	·	
<u> </u>					 						
		<u> </u>	<u> </u>		 			<u> </u>		 -	
		<u> </u>		- -			<u> </u>				
					ļ. -				<u></u>		
 	<u> </u>	<u> </u>	<u> </u>	<u> </u>							
					 	<u> </u>				· · · - · · · · · · · · · · · · · · · ·	
				<u> </u>	<u> </u>			<u> </u>			
											
							 	<u> </u>			
					<u> </u>						
RW1											
RW2					<u></u>	· _		<u> </u>			
HOLDING TANK		T	OTAL (INC)	IES)		WA	TER (INCHE	S)			
CONVERSION: INCHES TO FRACTIONAL FEET											
1/2	.04 08	2 V2 3	<u>.21</u> 25	41/2	<u>37</u> 6		8½ 9	<u>.70</u>	10½ 11	<u>.87</u> . <u>91</u>	
1 1 ½	<u>.08</u> .12	3 3½	<u>.25</u> . <u>29</u>	5½ 2	<u>46</u> 7	½ <u>.62</u>	91/2	.75 .79 .83	111/2	.95	
2	.16	4	.33	6 .	50 8	. <u>66</u>	10	<u>.83</u>			

CORPORATE ENVIRONMENTAL ADVISORS, INC. 453 Center Street, Ludlow, Massachusetts 01056 (413) 589-0548

<u>.12</u>

.16

 $1\frac{1}{2}$

2

312

.29

.33

OBSER										
SITE <u>Tex</u> a	aco Serv	<u>ice Stat</u>	ion		DAT	E <u>April</u>	13 , 1 989)		
LOCATION	<u>White</u>	River Ju	nction,	Vermont	PROJ	ECT NO	<u>2724-88</u>			
INSPECTO	R <u>S. S</u> po	lzino			INST	RUMENT_	Interface	e Probe		
		A	В	С	D	Е	F			· · · · · · · · · · · · · · · · · · ·
WELL	WELL DEPTH	CASING ELEV.	DEPTH TO PRODUCT	DEPTH TO WATER	PRODUCT THICK. (C-B)	PRODUCT ELEV. (A-B)	WATER ELEV. (A-C)		REMARKS	
CEA-1				8.91	0.00					
CEA-2				9.03	0.00					
CEA-4				9,52	0.00					
CEA-5				7.40	0.00					
CEA-6				8.71	0.00			· - ·		
RW				10.99	0.00					
				<u> </u>					······	
-										
									·	
										
						<u> </u>			<u></u>	
									<u>-</u>	
<u>-</u>										
	***								<u>.</u>	
										. <u></u> _
RW1									. <u>-</u> .	
RW2										
HOLDING TANK			OTAL (INCH	ES)		WA	TER (INCHE	S)		
				CONVER	SION: INCHE	S TO FRACT	IONAL FEET			
1/2 1	<u>.04</u> .08	212 3	. <u>21</u> . <u>25</u>		<u>37</u> 6 42 7	½ <u>.54</u> <u>.58</u>	8½ 9	. <u>70</u> . <u>75</u>	10½ 11	<u>.87</u> .91

.95

111/2

.79

.83

 $9^{1/2}$

10

.62

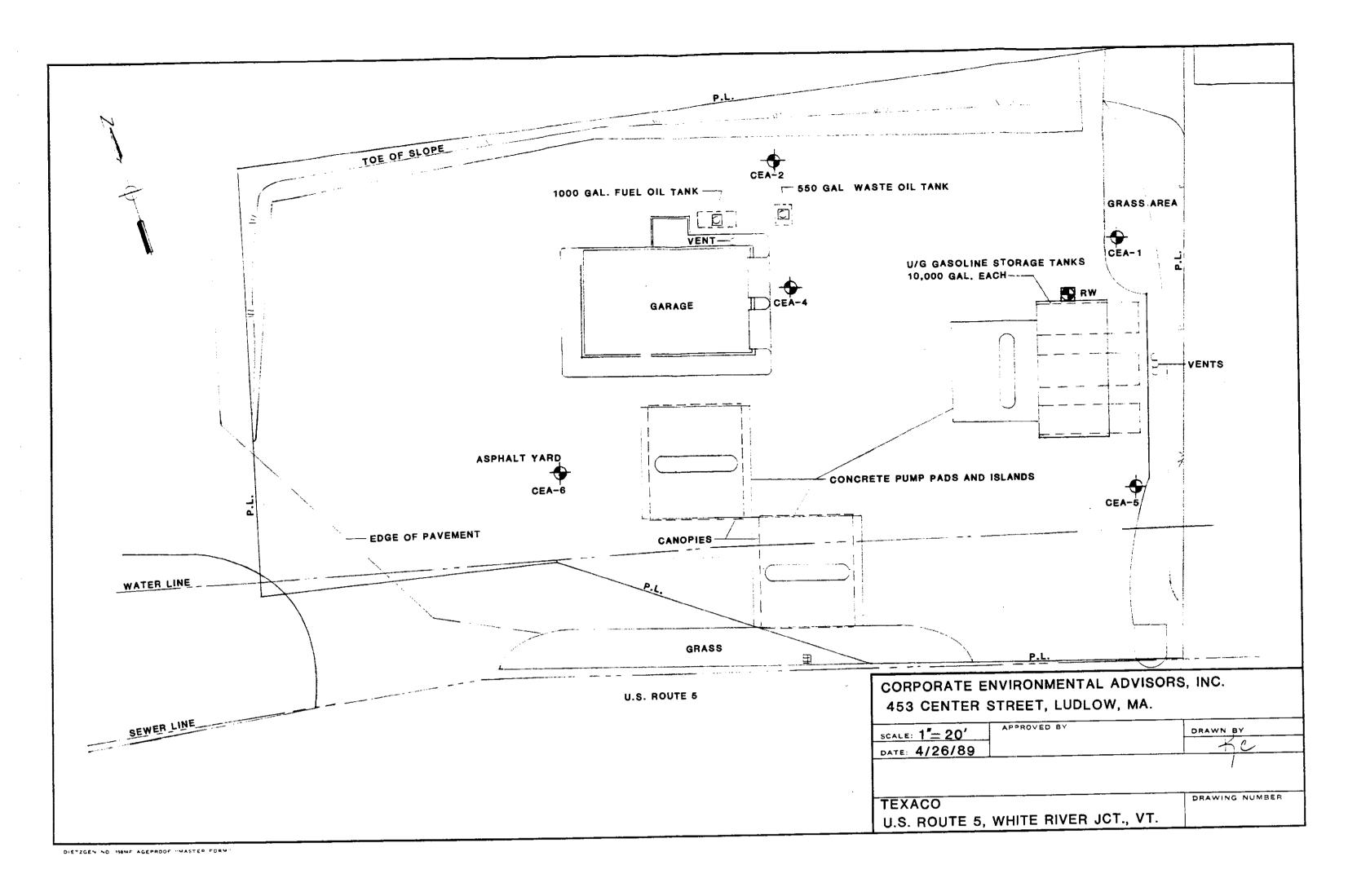
.66

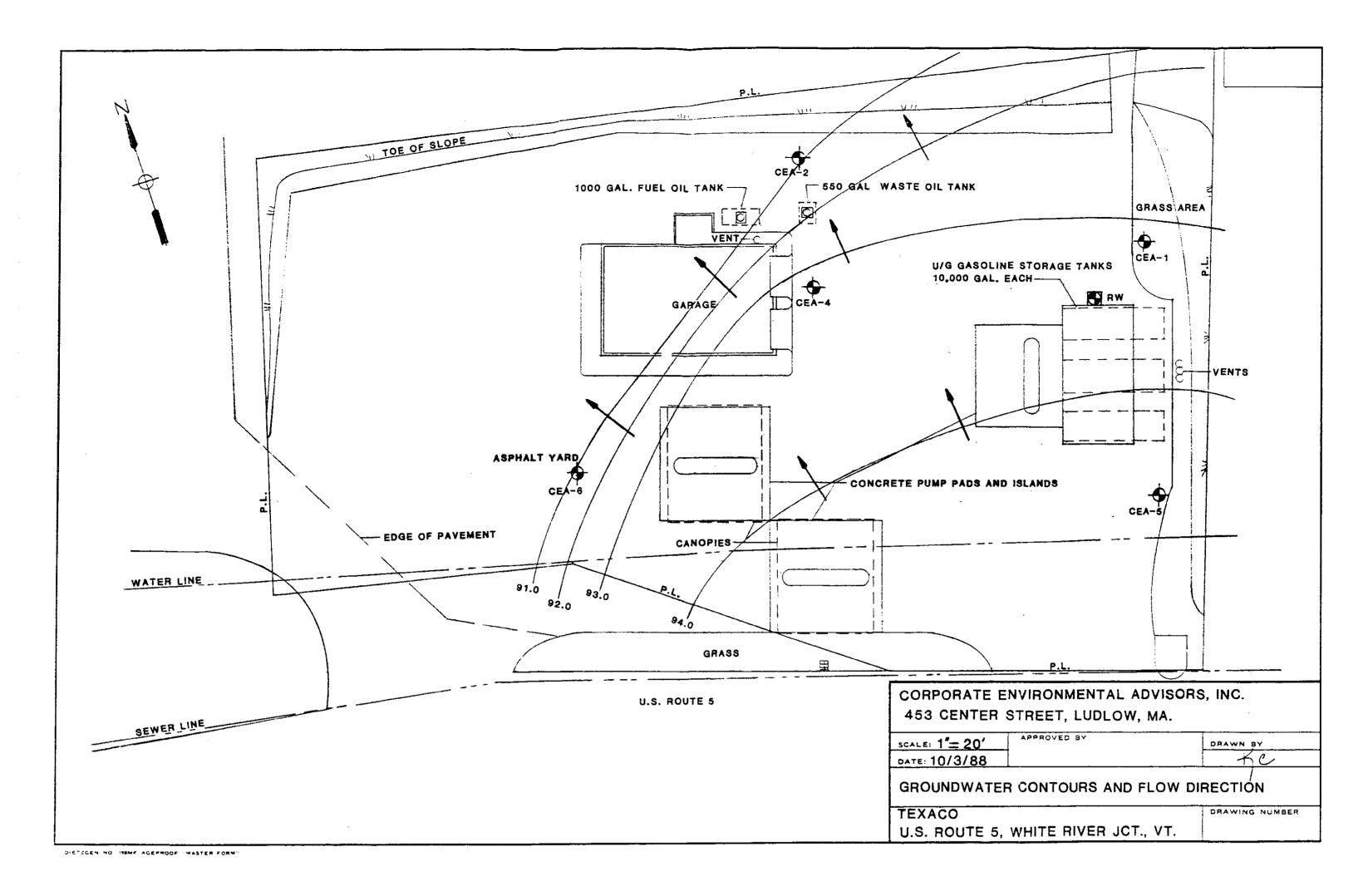
71/2

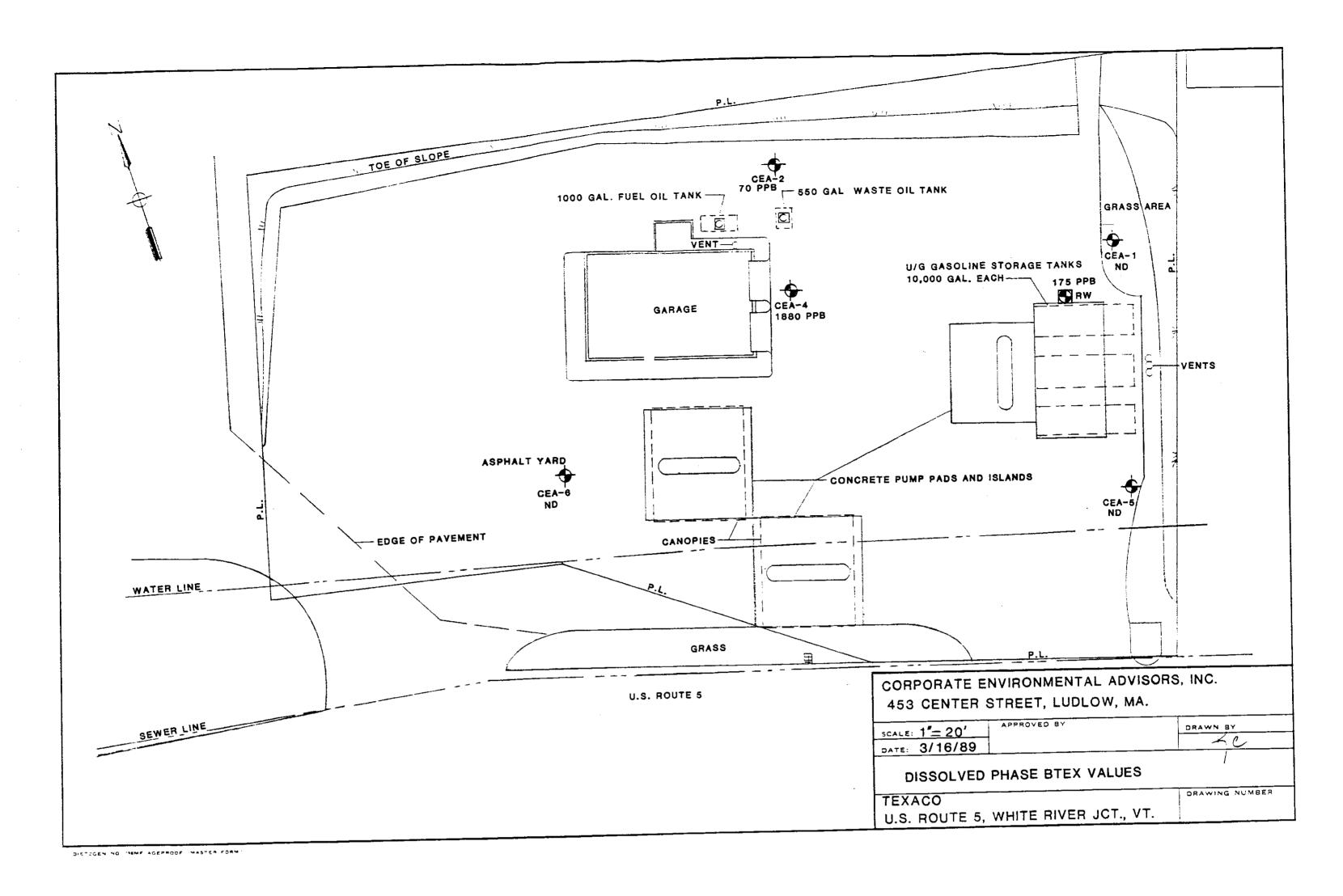
.46

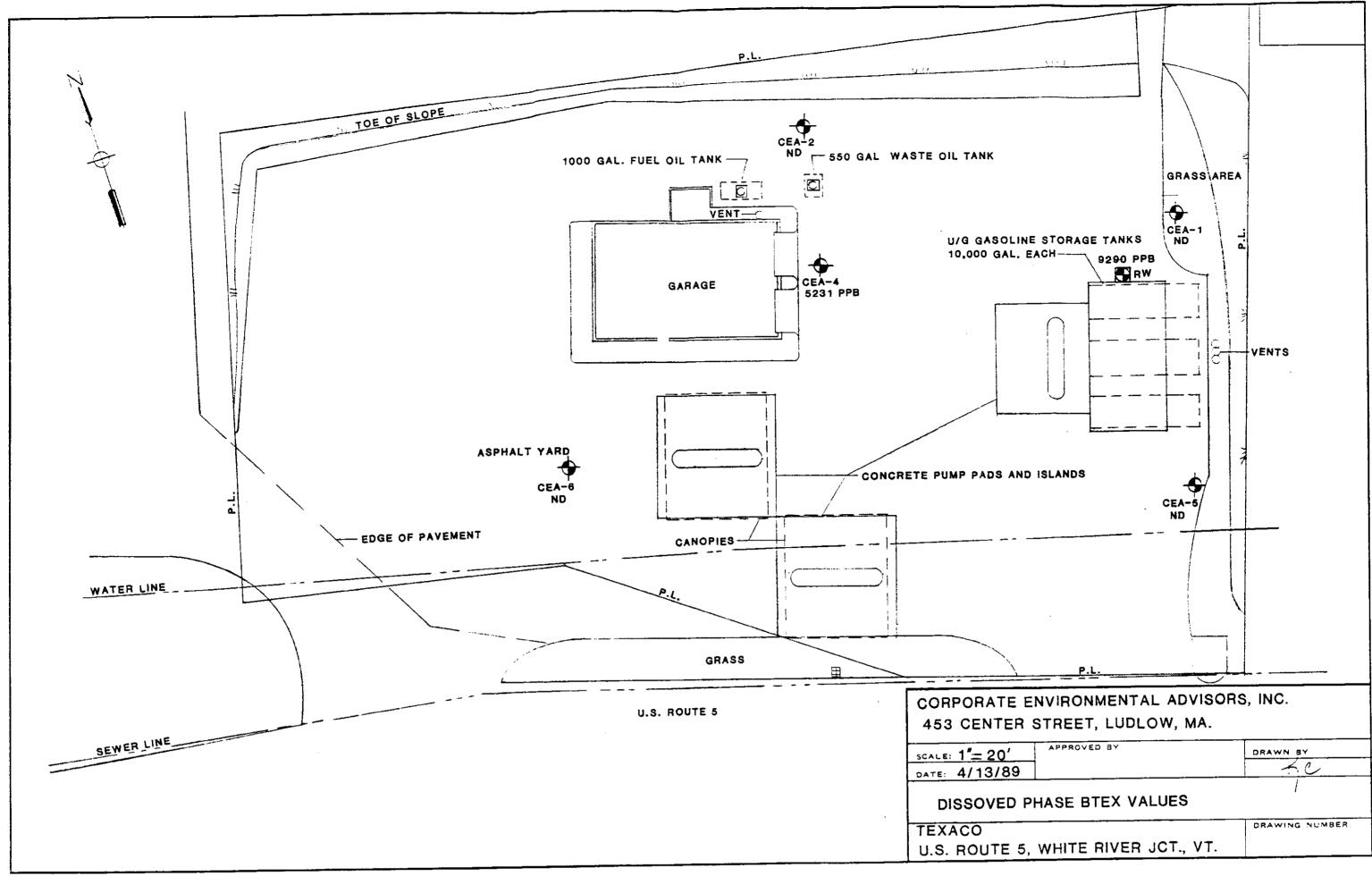
.50

51/2









DIETZGEN NO THME AGEPROOF MANTER FORM